Between circularity and bioeconomy: what the transition's agenda is doing to the socio-economic models of waste

Résumé

Since the turn of the 2010s, both the OECD and the European Commission (OECD, 2009; Geoghegan-Quinn, 2012) put the circular economy and, more recently, the bioeconomy at the heart of the transitions agenda (Dron, 2013; Sanz-Hernández et al., 2019). The circular economy now appears as a normative horizon for change, both a rationale for public policy and renewed regulation, and an imperative for critical innovation to meet today's economic, social and environmental challenges. While the circular economy and the bioeconomy open up prospects for balancing economic and environmental constraints, economic and political actors have different visions and associated imaginaries that collide (Friedrich et al., 2022). The link between the bioeconomy and the circular economy (Carrez and Van Leeuwen, 2015), widely recognized by the European Commission should ensure the environmental sustainability of the former (Stegmann et al., 2020).

The literature mainly focuses on categorizing models according to their innovation systems and business models (de Oliveira et al., 2019; Pieroni et al., 2019), their capacity to be alternative (Friant et al., 2020; Johansson and Henriksson, 2020, Ziegler et al., 2023), or their specific territorial features (Barles, 2010; Bahers and Kim, 2018; Bassi et al., 2021). Such research undoubtedly helps to document the diversity of the circular economy. However, the social and power asymmetrical relations (Feola, 2020), the equity issues (Ashton et al., 2022; Mathai et al., 2021) but also the confrontations and arrangements between players (Boltanski and Chiapello, 2007; Boltanski and Thévenot, 2006) – which we see as crucial dimensions of emerging socio-economic models – remain under-researched.

Thus, the aim of this special session is to offer a multidisciplinary contribution to the analysis of what the 'transition' agenda is doing to socio-economic models(1). Our goal is to study the concrete changes at work beyond the storytelling of a transition towards the circular economy and the bioeconomy, hypothesizing that this process is leading to a diversity of interrelated models. By focusing on this diversity of emerging models, but also the confrontations and arrangements between stakeholders, this special session aims at achieving a better understanding of the process of institutionalization of such socio-economic models, on the long run.

Our special session deals with two main research questions that have not yet been explicitly addressed in the extensive literature on the circular economy and the bioeconomy:

1- Do the different models of the bioeconomy and circular economy overlap or collide, and how?

2- Does the development and institutionalization of the circular economy and the bioeconomy paradoxically contribute to the market extension of the linear economy into areas that were previously non-market?

Proposals from different disciplines (e.g. economics, sociology, political science, anthropology, history, law, geography, etc.) based on various theoretical and/or empirical approaches are expected. Proposals may address issues related to the transformation and recovery of different types of biomass, agricultural waste, household waste, bio-waste, building and public works waste, etc., in urban and rural areas. Comparative and international analyses will be appreciated.

Paper proposal format: 1 page + bibliography

Proposals should be sent to: clarisse.cazals@inrae.fr and sylvain.le-berre@inrae.fr

References

Ashton, W. S., Fratini, C. F., Isenhour, C., & Krueger, R. (2022). Justice, equity, and the circular economy: introduction to the special double issue. *Local Environment*, 27(10–11), 1173–1181.

Bahers J-B and Kim J. (2018) Regional approach of waste electrical and electronic equipment (WEEE) management in France. *Resources, Conservation and Recycling* 129: 45-55.

Barles S. (2010) Society, energy and materials: the contribution of urban metabolism studies to sustainable urban development issues. *Journal of environmental planning and management* 53: 439-455.

Bassi AM, Bianchi M, Guzzetti M, et al. (2021) Improving the understanding of circular economy potential at territorial level using systems thinking. *Sustainable Production and Consumption* 27: 128-140.

Boltanski L. and Chiapello E., (2007) The New Spirit of Capitalism, Verso.

Boltanski L. and Thévenot L., (2006) On Justification. Economies of Worth. Princeton University Press.

Boyer R, Freyssenet M and Sitkin A. (2002) The productive models: the conditions of profitability: Springer.

Carrez D and Van Leeuwen P. (2015) Bioeconomy: circular by nature. *The European Files* 38: 34-35.

de Oliveira MCC, Machado MC, Jabbour CJC, et al. (2019) Paving the way for the circular economy and more sustainable supply chains: shedding light on formal and informal governance instruments used to induce green networks. *Management of Environmental Quality:* An International Journal.

Dron D. (2013) Les contours d'une bioéconomie soutenable. Annales des Mines - Réalités industrielles Février 2013: 77.

Feola G., (2020), Capitalism in sustainability transitions research: Time for a critical turn? *Environmental Innovation and Societal Transitions*, 35: 241-250.

Friant MC, Vermeulen WJ and Salomone R. (2020) A typology of circular economy discourses: Navigating the diverse visions of a contested paradigm. *Resources, Conservation* and *Recycling* 161: 104917.

Friedrich J, Najork K, Keck M, et al. (2022) Bioeconomic fiction between narrative dynamics and a fixed imaginary: Evidence from India and Germany. *Sustainable Production* and Consumption 30: 584-595.

Geoghegan-Quinn M. (2012) Innovating for sustainable growth: A Bioeconomy for Europe. *Press conference, Brussels.*

Johansson N and Henriksson M. (2020) Circular economy running in circles? A discourse analysis of shifts in ideas of circularity in Swedish environmental policy. *Sustainable Production and Consumption* 23: 148-156.

Mathai MV, Isenhour C, Stevis D, et al. (2021) The political economy of (un) sustainable production and consumption: A multidisciplinary synthesis for research and action. *Resources, Conservation and Recycling* 167: 105265.

OECD. (2009) The Bioeconomy to 2030: Designing a Policy Agenda, Scoping Document. Organisation for Economic Cooperation and Development Paris.

Pieroni MP, McAloone TC and Pigosso DC. (2019) Business model innovation for circular economy and sustainability: A review of approaches. *Journal of cleaner production* 215: 198-216.

Salais; R and Storper M. (1997) Worlds of Production: The Action Frameworks of the Economy, Harvad University Press.

Sanz-Hernández A, Esteban E and Garrido P. (2019) Transition to a bioeconomy: Perspectives from social sciences. *Journal of Cleaner Production* 224: 107-119.

Stegmann P, Londo M and Junginger M. (2020) The circular bioeconomy: Its elements and role in European bioeconomy clusters. Resources, Conservation & Recycling: X 6: 100029.

Ziegler R, Bauwens T, Roy MJ, et al. (2023) Embedding circularity: Theorizing the social economy, its potential, and its challenges. *Ecological Economics* 214: 107970.

(1) We define a socio-economic model as a social configuration of the economy, resulting from transactional practices between players in a context of asymmetrical power relations.

Mots-Clés: Waste policy, Circular economy, Bioeconomy, Confrontation, Arrangements, Territorialization, Transition